

For Research Use Only

# PKC Alpha Monoclonal antibody

Catalog Number: 66421-1-Ig

Featured Product

2 Publications



## Basic Information

### Catalog Number:

66421-1-Ig

### GenBank Accession Number:

BC109274

### Purification Method:

Protein A purification

### Size:

150ul, Concentration: 1000 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

### GeneID (NCBI):

5578

### CloneNo.:

1D11F4

### Source:

Mouse

### UNIPROT ID:

P17252

### Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:50-1:500

IF/ICC 1:400-1:1600

FC (Intra) 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

### Isotype:

IgG1

### Full Name:

protein kinase C, alpha

### Observed MW:

77 kDa

### Immunogen Catalog Number:

AG17275

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

### Positive Controls:

WB : HeLa cells, HEK-293 cells, C6 cells, RAW 264.7 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells

### Cited Applications:

WB

IHC : human lung cancer tissue,

### Species Specificity:

human, mouse, rat

IF/ICC : HeLa cells,

### Cited Species:

human, mouse

FC (Intra) : HeLa cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. PRKCA is one of the PKC family members. This kinase has been reported to play roles in many different cellular processes, such as cell adhesion, cell transformation, cell cycle checkpoint, and cell volume control. Knockout studies in mice suggest that this kinase may be a fundamental regulator of cardiac contractility and Ca(2+) handling in myocytes.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jinlong Cao	39528080	Life Sci	WB
Xiujuan Li	37084658	Ecotoxicol Environ Saf	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

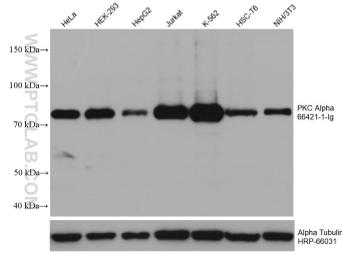
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

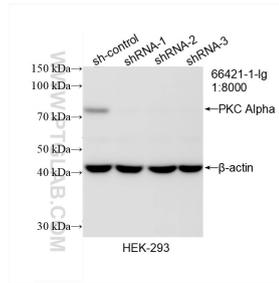
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

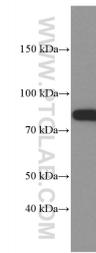
## Selected Validation Data



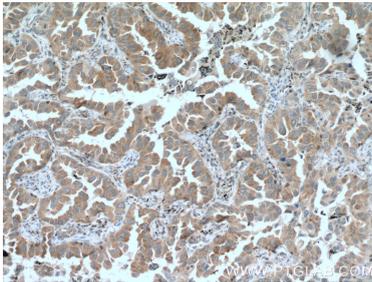
Various lysates were subjected to SDS PAGE followed by western blot with 66421-1-Ig (PKC Alpha antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



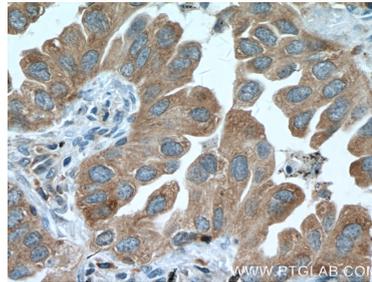
WB result of PKC Alpha antibody (66421-1-Ig; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PKC Alpha transfected HEK-293 cells.



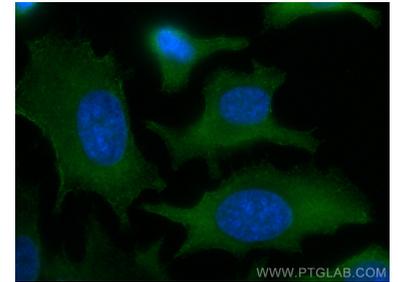
HeLa cells were subjected to SDS PAGE followed by western blot with 66421-1-Ig (PKC alpha antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



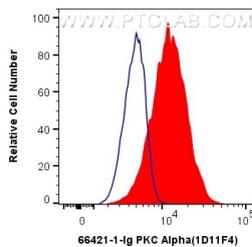
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66421-1-Ig (PKC alpha antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66421-1-Ig (PKC alpha antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using PKC Alpha antibody (66421-1-Ig, Clone: 1D11F4) at dilution of 1:800 and CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L).



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.4 ug Anti-Human PKC Alpha (66421-1-Ig, Clone:1D11F4) and CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).